DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A22NM Revision 11 Husky A-1 A-1A A-1B July 30, 1999

TYPE CERTIFICATE DATA SHEET NO. A22NM

This data sheet which is part of Type Certificate No.A22NM prescribes conditions and limitations under which the product for which the type certificate was issued meets the Airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Sky International Inc. (See Note 11)

672 South Washington Street Afton, Wyoming 83110

Type Certificate Ownership Record:

Christen Industries transferred ownership of Type Certificate A22NM

to Aviat, Inc. on April 4, 1991.

Aviat, Inc. transferred ownership of Type Certificate A22NM to White

International, LTD. on December 3, 1992.

White International, LTD. transferred ownership of Type Certificate

A22NM to Sky International, Inc. on January 10, 1996.

I. Model A-1, 2PCLM (Normal Category), Approved May 1, 1987

Engine Lycoming O-360-C1G (180 h.p.), or

Lycoming O-360-A1P (180 h.p.)

Fuel 100/100LL grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m

Propeller and Hartzell HC-C2YK-1Bf/F7666A (Constant Speed)

Propeller Limits Diameter not over 76 in., not under 72 in.

(See Note 3)

Pitch settings at 30 in. station low $11.7 \circ \pm .2^{\circ}$, high $29.0 \circ \pm 1.0^{\circ}$,

(See Note 9)

Hartzell spinner assy 836-60 (Required).

Hartzell governor V3-6

Placard required: "AVOID CONTINUOUS OPERATIONS

BETWEEN 2000-2250 RPM"

Page No.	1	2	3	4	5	6	7
Revision	11	11	11	11	11	11	11

I. Model A-1, 2PCLM (Normal Category), Approved May 1, 1987 (cont'd)

Airspeed Limits (CAS) Never Exceed 153 mph (133 kts)

Maximum Structural Cruising 119 mph (103 kts)
Maneuvering 94 mph (82 kts)
Flaps Extended 73 mph (63 kts)

C.G. Range (+74.5) to (+78.4) at 1800 lbs

(+72.5) to (+78.4) at 1500 lbs and below Straight line variation between points given

Empty wt. C.G. Range None

Datum 60 in. forward of wing leading edge

Leveling Means Cabin door, lower sill

Maximum Weight 1800 lbs

No. of Seats 2 (1 at +72.5 and 1 at +99.0)

Maximum baggage 50 lb. (at +120.0)

Fuel Capacity 52 gal. (two 26 gal. Tanks in wings at +84.0)

50 gal usable. See NOTE 1 for data on unusable fuel.

Oil Capacity 8 qts. (+25.9)

Control Surface Movements Elevator UP $29^{\circ} \pm 1^{\circ}$ DOWN $15^{\circ} \pm 1^{\circ}$

Ailerons UP $20^{\circ} \pm 2^{\circ}$ DOWN $20^{\circ} \pm 2^{\circ}$ Rudder LEFT $25^{\circ} \pm 2^{\circ}$ RIGHT $25^{\circ} \pm 2^{\circ}$ Flaps UP 0° DOWN $30^{\circ} + 0^{\circ}$, -2°

Serial Nos. Eligible 1001 and up

Certification Basis Part 23 of the Federal Aviation Regulations dated February 1, 1965 as

amended by 23-1 thru 23-31 (Normal Category) and FAR 36 amended

thru 36-12,. FAR 21 amended thru 21-57

Application for Type Certificate dated November 20, 1985.

Type Certificate No. A22NM issued May 1, 1987.

Production Basis Production Certificate No. 2NM

Equipment The basic required equipment as prescribed in the applicable

airworthiness regulations must be installed in the aircraft for certification. In addition, the following items of equipment are

required:

1. FAA Approved Airplane Flight Manual

2. Stall Warning indicator.

3. Cylinder head temperature gage.

II. Model A-1A, 2PCLM (Normal Category), Approved January 28, 1998

The A-1A is a derivative model of the A-1. The A-1A has a gross weight of 1890 lbs. The airframe has been modified structurally to accept this higher gross weight.

Engine Lycoming O-360-A1P (180 h.p.))

Fuel 100/100LL grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m

Propeller and Hartzell HC-C2YK-1BF/F7666A (Constant Speed)

Propeller Limits Diameter not over 76 in., not under 72 in.

(See Note 3)

Pitch setting at 30 in. station low $11.7^{\circ}\pm.2^{\circ}$, high $29.0^{\circ}\pm1.0^{\circ}$,

Hartzell governor V3-6

Placard required: "AVOID CONTINUOUS OPERATIONS BETWEEN 2000-2250 RPM"

Airspeed Limits (CAS) Never Exceed 153 mph (133 kts)

Maximum Structural Cruising 119 mph (103 kts) Maneuvering 99 mph (86 kts)

Flaps Extended

S/N 1395 to 1429 73 mph (73 kts) S/N 1430 and up 80 mph (70 kts)

(See Note 14)

C.G. Range (+74.5) to (+78.4) at 1890 lb.

(+72.5) to (+78.4) at 1500 lb. and below Straight line variation between points given

Empty wt. C.G. Range None

Datum 60 in. forward of wing leading edge

Leveling Means Cabin door, lower sill

Maximum Weight 1890 lb.

No. of Seats 2 (1 at +72.5 and 1 at +99.0)

Maximum baggage 50 lb. (+120.0)

Fuel Capacity 52 gal. (two 26 gal. Tanks in wings at +84.0)

50 gal usable. See NOTE 1 for data on unusable fuel.

Oil Capacity 8 qts. (+25.9)

II. Model A-1A, 2PCLM (Normal Category), Approved January 28, 1998 (cont'd)

Control Surface Movements Elevator UP $29^{\circ} \pm 1^{\circ}$ DOWN $15^{\circ} \pm 1^{\circ}$

Ailerons UP $20^{\circ} \pm 2^{\circ}$ DOWN $20^{\circ} \pm 2^{\circ}$ Rudder LEFT $25^{\circ} \pm 2^{\circ}$ RIGHT $25^{\circ} \pm 2^{\circ}$ Flaps UP 0° DOWN $30^{\circ} + 0^{\circ}$, -2°

Serial Nos. Eligible 1395 to 1999.

Certification Basis Part 23 of the Federal Aviation Regulations dated February 1, 1965 as

amended by 23-1 thru 23-31 (Normal Category) and FAR 36 amended

thru 36-12,. FAR 21 amended thru 21-57

Application for Type Certificate dated August 25, 1997.

Type Certificate No. A22NM issued January 28, 1998.

Production Basis Production Certificate No. 704NM

Equipment The basic required equipment as prescribed in the applicable

airworthiness regulations must be installed in the aircraft for certification. In addition, the following items of equipment are

required:

1. FAA Approved Airplane Flight Manual

2. Stall Warning indicator.

3. Cylinder head temperature gage.

III. Model A-1B, 2PCLM (Normal Category), Approved January 28, 1998

The A-1B is a derivative model of the A-1. The A-1B has a gross weight of 2000 lbs. The airframe has been modified structurally to accept this higher gross weight. The C.G. envelope has been expanded forward and aft. NOTE: See serial numbers eligible under this model.

Engine Lycoming O-360-A1P (180 h.p.)

Fuel 100/100LL grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m

Propeller and Hartzell HC-C2YK-1BF/f7666A (Constant Speed)

Propeller Limits Diameter not over 76 in., not under 72 in.

(See Note 3)

Pitch setting at 30 in. station low $11.7^{\circ} \pm .2^{\circ}$, high $29.0^{\circ} \pm 1.0^{\circ}$,

Hartzell spinner assy 836-60 (Required).

Hartzell governor V3-6

Placard required: "AVOID CONTINUOUS OPERATIONS BETWEEN 2000-2250 RPM"

III. Model A-1B, 2PCLM (Normal Category), Approved January 28, 1998 (cont'd)

Airspeed Limits (CAS) Never Exceed 153 mph (133 kts)

Maximum Structural Cruising 119 mph (103 kts)
Maneuvering 113 mph (98 kts)
Flaps Extended 80 mph (70 kts)

C.G. Range (+73.6) to (+80.0) at 2000 lb.

(+71.0) to (+80.0) at 1530 lb. and below Straight line variation between points given

Empty wt. C.G. Range None

Datum 60 in. forward of wing leading edge

Leveling Means Cabin door, lower sill

Maximum Weight 2000 lb.

No. of Seats 2 (1 at +72.5 and 1 at +99.0)

Maximum baggage 50 lb. (+120.0)

Fuel Capacity 52 gal. (two 26 gal. Tanks in wings at +84.0)

50 gal usable. See NOTE 1 for data on unusable fuel.

Oil Capacity 8 qts. (+25.9)

Control Surface Movements Elevator UP 29° ± 1° DOWN 15° ± 1°

Ailerons UP 20° ± 2° DOWN 20° ± 2° Rudder LEFT 25° ± 2° RIGHT 25° ± 2° Flaps UP 0° DOWN 30° + 0°, -2°

Serial Nos. Eligible 2000 and up.

New optional rear spar material incorporated at S/N 2001. Was

6061-T6. Is: 7075-T76.

Certification Basis Part 23 of the Federal Aviation Regulations dated February 1, 1965 as

amended by 23-1 thru 23-31 (Normal Category) and FAR 36

amended thru 36-12,. FAR 21 amended thru 21-57.

Application for Type Certificate dated August 25, 1997.

Type Certificate No. A22NM issued January 28, 1998.

Production Basis Production Certificate No. 704NM

Equipment The basic required equipment as prescribed in the applicable airworthiness

regulations must be installed in the aircraft for certification. In addition, the

following items of equipment are required:

1. FAA Approved Airplane Flight Manual

2. Stall Warning indicator.

3. Cylinder head temperature gage.

NOTES

NOTE 1 Current weight and balance report, together with list of equipment included in certificated empty weight must be provided for each aircraft at the time of the original certification. The certified empty weight and corresponding center of gravity location must include unusable fuel of 12.0 lb. at (+84.0) NOTE 2 All placards specified in the FAA approved Airplane Flight Manual must be displayed in the airplane in the appropriate locations. NOTE 3 Aircraft Flight Manual Supplement, Revision F, dated October 14, 1988, is required for propeller diameters less than 76". NOTE 4 Export aircraft to Germany incorporating the Lycoming 0-360-C1G engine are certified for use with a 72 inch dia. Propeller, VFR day and night only, and 2550 RPM max. continuous power, with 2700 RPM max. take-off power for 5 minutes. Export aircraft to Austria, Germany, or Switzerland incorporation the Lycoming 0-360-A1P engine must have a 72 inch dia. Propeller and be limited to 2400 RPM max. continuous power and 2700 RPM max. continuous take-off power for 5 minutes. Aviat Aircraft Inc. Flight Manual Supplement dated December 1, 1994 or later FAA approved revision is required. NOTE 5 Model A-1, A-1A and A-1B are approved for use with Aero Ski Models M1500, M1800, M2000, and M3000H installed per Christen Drawing 35569. Christen Airplane Flight Manual Supplement, dated April 11, 1988, or later FAA approved revision for fixed ski operation is required. NOTE 6 The Model A-1, A-1A and A-1B is approved for banner and glider towing when a Schweizer tow hook is installed in accordance with Christen Drawing 35572. Christen Aircraft Flight Manual Supplement, dated September 1, 1998, or later FAA approved revision for banner and glider tow operations is required. NOTE 7 The Models A-1, A-1A and A-1B are approved for use with EDO 89-2000 Floats installed in accordance with Christen Drawing 35600. Christen Aircraft Flight Manual Supplement, dated February 28, 1989, or later FAA approved revision for the floatplane configuration is required. The maximum aircraft gross weight for all models with EDO 89-2000 floats installed is 1980 pounds. NOTE 8 Models A-1, A-1A and A-1B are approved for use with Aero Ski Models R2800 retractable ski installed per Christen Drawing 35593. Christen Airplane Flight Manual Supplement, dated Nov 7, 1989, or later FAA approved revision for retractable ski operation is required. NOTE 9 These aircraft propellers may be reset to the page 1 setting if accomplished by and FAA approved propeller repair station. Serial Numbers 1001 thru 1222 were set to a low pitch setting of 13° , $+0^{\circ}$, $-.5^{\circ}$ NOTE 10 Model A-1, A-1A and A-1B are approved for use with optional skylight panel installed in accordance with Aviat Aircraft Inc. drawing 35640.

Aviat Aircraft Inc., P.O. box 1240, 672 South Washington Street, Afton, Wyoming is licensed by Sky International Inc. to manufacture and obtain airworthiness certificate for the Model A-1, A-1A, and A-1B aircraft listed in the Type Certificates Data Sheet.

NOTE 11

NOTE 12 Model A-1, A-1A, and A-1B are approved for use with Horizon Instruments Model P-100 Digital Engine Tachometer. Aviat Aircraft Inc. Flight Manual Supplement date Dec. 4, 1997 or later FAA approved revision is required.

NOTE 13 The following main gear tires are approved for use on models A-1, A-1A and A-1B:

6.00 x 6 4-ply Type III tube 8.00 x 6 4-ply Type III tube. 8.50 x 6 6-ply Type III tube. 24 x 10-6 Type III Tundra

26 x 10.5-6 Tundra and 8.50 x 6 tube.

NOTE 14 Model A-1A S/N 1395 to 1429 are eligible for increased flap speed of 80 mph if airspeed indicator P/N 81714 is installed and Flight Manual is updated to reflect 80 mph flap speed.

NOTE 15 Models A-1A, and A-1B are approved for use with Baumann Model BF-2100 Floats installed in accordance with Aviat Aircraft Drawing 37600. The A-1 is float certified at 1980 pounds GW, the A-1A is float certified at 2079 pounds GW (1890 lbs. for A-1A land plane + 189 lbs. for floats), and the A-1B is float certified at 2200 pounds GW. FAA approved Flight Manual Supplement dated August 31, 1998 or later for above float plane configurations is required.

Models A-1, A-1A, and A-1B are approved for use with the Alaskan Bushwheel P/N 31136, 31" Diameter Tundra tire. Model A-1 must have the Aero Ski gear P/N 35017-503 and 35017-504 installed in conjunction with the 31" tundra tires P/N 31136. The Scott 10" Model L3450 tail wheel must also be installed per Aviat Aircraft Drawing 35340 on the model A-1and A-1A or per Aviat Aircraft Drawing 37340 on the Model A-1B. FAA approved Flight Manual Supplement dated September 18, 1998 or later for the Tundra Tire configuration is required.

NOTE 17 Models A-1A effective serial number 1451 and above and A-1B effective serial numbers 2007 and above are equipped for a baggage area access door located below the right hand aft side window. The door is standard for the A-1B and optional for the A-1A and available as a production design change only on the serial numbers listed above.